

## A59316

Query Match 100.0%; Score 611; DB 1; Length 117;  
Best Local Similarity 100.0%; Pred. No. 9.3e-55;  
Matches 117; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

[illegible]

RESULT 1

GHRL\_HUMAN

ID GHRL\_HUMAN STANDARD; PRT; 117 AA.  
AC Q9UBU3; Q8TAT9; Q9H3R3;  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2003 (Rel. 41, Last sequence update)  
DT 15-MAR-2004 (Rel. 43, Last annotation update)  
DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone  
DE releasing peptide) (Motilin-related peptide) (M46 protein)  
DE (UNQ524/PRO1066).  
GN GHRL OR MTLRP.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A. (ISOFORM 1), AND ACYLATION OF SER-26.  
RX MEDLINE=20067959; PubMed=10604470;  
RA Kojima M., Hosoda H., Date Y., Nakazato M., Matsuo H., Kangawa K.;  
RT "Ghrelin is a growth-hormone-releasing acylated peptide from  
RT stomach.";  
RL Nature 402:656-660(1999).  
RN [2]  
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).  
RA Kojima M.;  
RL Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.  
RN [3]  
RP SEQUENCE FROM N.A. (ISOFORM 1).  
RC TISSUE=Stomach;  
RA Tomasetto C., Karam S.M., Rio M.-C.;  
RT "Identification of a novel gastric protein m46.";  
RL Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.  
RN [4]  
RP SEQUENCE FROM N.A. (ISOFORM 1).  
RA Wajnrajch M.P., Ten I.S., Gertner J.M., Leibel R.L.;  
RT "Genomic organization of the human Ghrelin gene.";  
RL J. Endocr. Genet. 1:231-233(2000).  
RN [5]  
RP SEQUENCE FROM N.A. (ISOFORM 1).  
RX MEDLINE=22887296; PubMed=12975309;  
RA Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J.,  
RA Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,  
RA Eaton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S.,  
RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,  
RA Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.,  
RA Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,  
RA Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.-H., Yansura D.,  
RA Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,  
RA Godowski P.;  
RT "The secreted protein discovery initiative (SPDI), a large-scale  
RT effort to identify novel human secreted and transmembrane proteins: a  
RT bioinformatics assessment.";  
RL Genome Res. 13:2265-2270(2003).  
RN [6]  
RP SEQUENCE FROM N.A. (ISOFORM 1).  
RC TISSUE=Blood;  
RX MEDLINE=22388257; PubMed=12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,  
 RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,  
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,  
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,  
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,  
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,  
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;  
 RT "Generation and initial analysis of more than 15,000 full-length human  
 RT and mouse cDNA sequences.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

RN [7]

RP SEQUENCE OF 24-33.

RC TISSUE=Stomach;

RX MEDLINE=20389976; PubMed=10930375;

RA Tomasetto C., Karam S.M., Ribieras S., Masson R., Lefebvre O.,

RA Staub A., Alexander G., Chenard M.-P., Rio M.-C.;

RT "Identification and characterization of a novel gastric peptide

RT hormone: the motilin-related peptide.";

RL Gastroenterology 119:395-405(2000).

RN [8]

RP REVIEW.

RX MEDLINE=21203998; PubMed=11306336;

RA Kojima M., Hosoda H., Matsuo H., Kangawa K.;

RT "Ghrelin: discovery of the natural endogenous ligand for the growth

RT hormone secretagogue receptor.";

RL Trends Endocrinol. Metab. 12:118-122(2001).

CC -!- FUNCTION: Specific ligand for the growth hormone secretagogue  
 CC receptor type 1 (GHSR) inducing the release of growth hormone from  
 CC the pituitary. Has an appetite-stimulating effect, induces  
 CC adiposity and stimulates gastric acid secretion. Involved in  
 CC growth regulation.

CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- ALTERNATIVE PRODUCTS:

CC Event=Alternative splicing; Named isoforms=2;

CC Name=1; Synonyms=Ghrelin;

CC IsoId=Q9UBU3-1; Sequence=Displayed;

CC Name=2; Synonyms=del-Gln14-ghrelin;

CC IsoId=Q9UBU3-2; Sequence=VSP\_003245;

CC -!- PTM: O-n-octanoylation is essential for activity.

CC -!- SIMILARITY: Belongs to the motilin family.

CC -!- DATABASE: NAME=Atlas Genet. Cytogenet. Oncol. Haematol.;

CC

WWW="<http://www.infobiogen.fr/services/chromcancer/Genes/GhrelinID327.html>".

CC

CC -----  
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 CC the European Bioinformatics Institute. There are no restrictions on its



Result No.	Score	% Query Match	Length	DB	ID	Description
1	611	100.0	117	3	US-09-046-479-2	Sequence 2, Appli
2	611	100.0	117	4	US-08-822-897C-2	Sequence 2, Appli
3	611	100.0	117	4	US-09-608-810A-4	Sequence 4, Appli
4	611	100.0	117	4	US-09-404-417A-2	Sequence 2, Appli
5	91	14.9	18	4	US-09-404-417A-11	Sequence

6291653  
6380158  
6420521  
6,629,729

530

326

227

328

309